

Your students' interest will

# multiply

with Microsoft® Mathematics 4.0.

While teachers are under pressure to raise math and science test scores on standardized tests, many students find math their most frustrating subject. With Microsoft Mathematics, teachers can equip students with the tools they need to grasp the concepts behind the correct answers. When that happens, students' engagement and comprehension can rise exponentially.

# Encourage. Visualize. Solve.

Microsoft Mathematics is a free, powerful computer algebra system with a friendly user interface. It works in parallel with your teaching to help students stay engaged in math and science. Algebra and geometry students benefit from fast, clear equation-solving, while more advanced students get help in subjects such as calculus, trigonometry, physics, and chemistry.

## Top 3 reasons to use it

### 1) Free and easy.

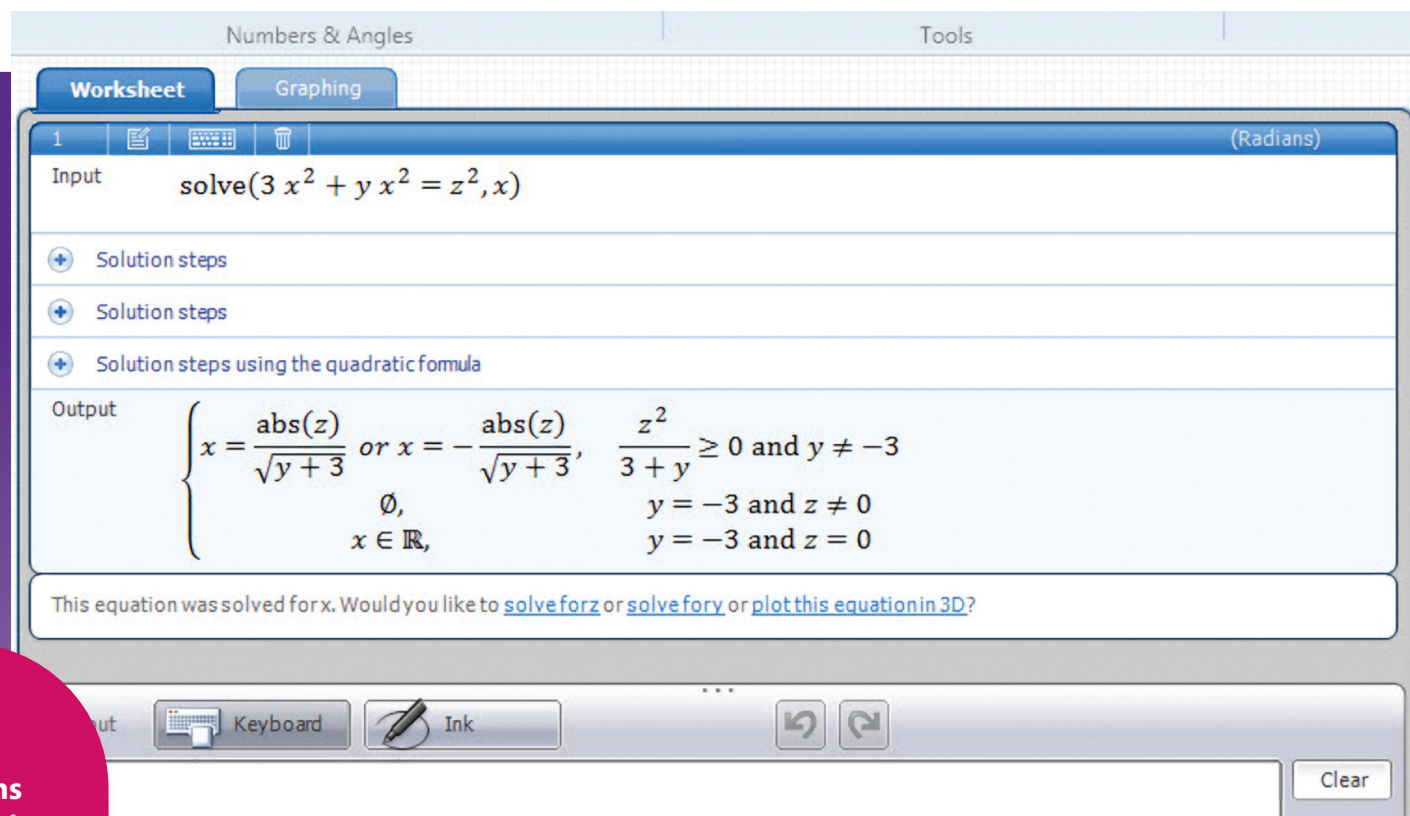
Microsoft Mathematics is a free download that's easy to install. It works with PCs and Windows® operating systems. The approachable user interface is arranged in a familiar Microsoft Office style. Menus are clearly organized and functions are easy to find.

### 2) Step-by-step learning.

Teachers can use Equation Solver to demonstrate step-by-step solutions to many math problems, from pre-algebra to calculus. Microsoft Mathematics shows students every step on the path to the right answer. Increasing understanding is the first step toward improving test scores.

### 3) Powerful visualization tools.

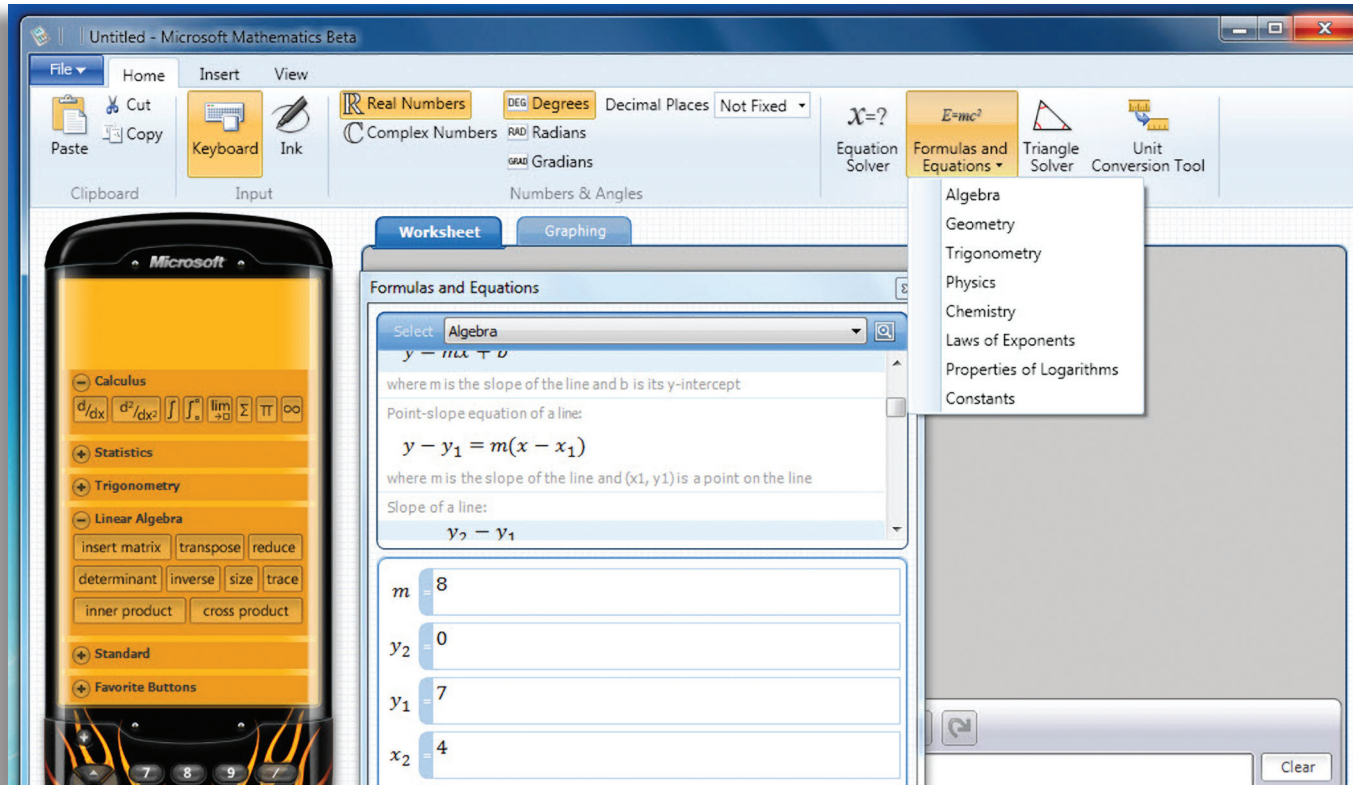
A serious graphing calculator is built in. Teachers can capture students' imaginations with dynamic color visualization of complex math problems. Students can take advantage of full-fledged graphing capabilities, including Cartesian, spherical, and cylindrical 3D options.



# A clearer path to understanding math.

**As students advance, Math can become overwhelming, even for some students who excelled at lower levels.**

Microsoft Mathematics empowers students to engage with potentially intimidating problems, giving them the tools not only to arrive at the right answers, but to understand how they got there.



## 1) Zero in on answers, step by step.

Microsoft Mathematics helps you guide students along every step toward the solution of a problem. A worksheet area lets students work through math equations and

expressions, saving their work for later review. As they retrace their steps, they develop the kind of comprehension that leads to deepening curiosity, not just higher test scores.

## 2) Assistance close at hand.

Thorough tutorials help students understand, practice, and excel at new math concepts. A handy library of formulas and equations offers instruction and help for more than a hundred common equations, eliminating a major source of frustration and confusion.

## 3) Intuitive interface.

Microsoft Mathematics has a powerful computing engine but a friendly user interface. Menus of commands are presented in a way that will be immediately familiar to users of Microsoft Office applications. And it's easy to hide functions that a student won't be using until next semester or next year.

## 4) Help at home.

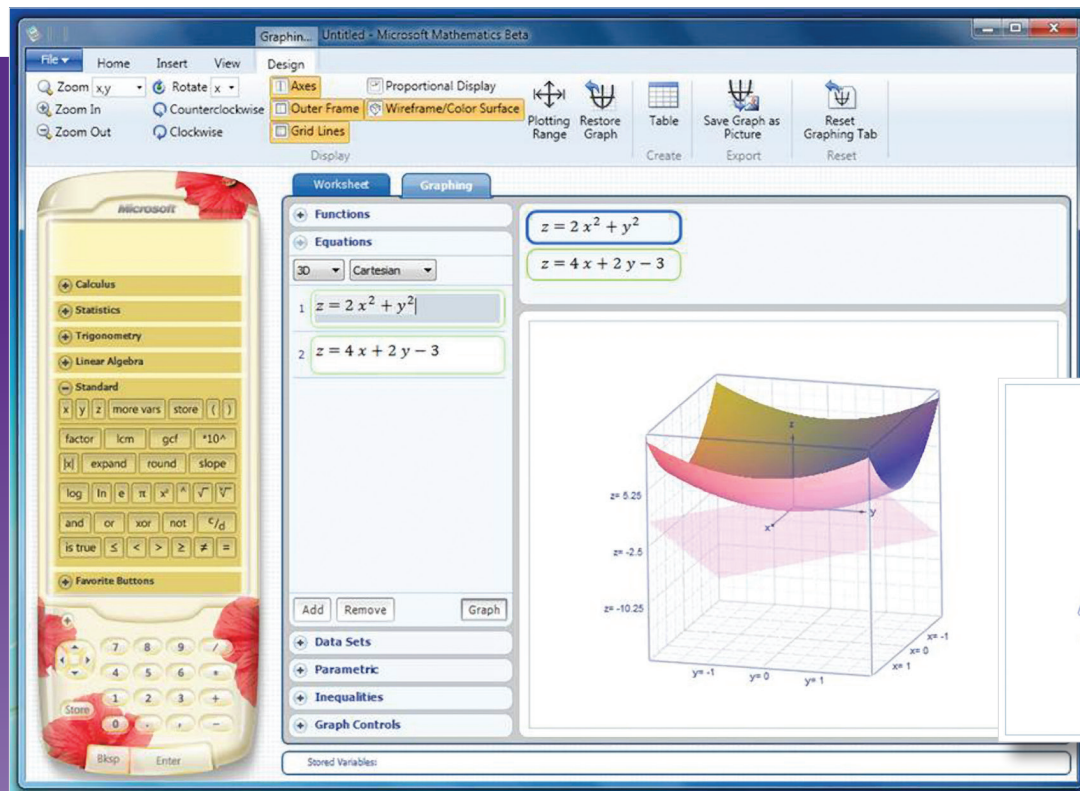
Microsoft Mathematics can serve as a homework aid for students, helping to reinforce concepts they learned in class. Parents, who often have a harder time helping with math than with other subjects, can use Microsoft Mathematics to refresh their skills and help students prepare for the next test.





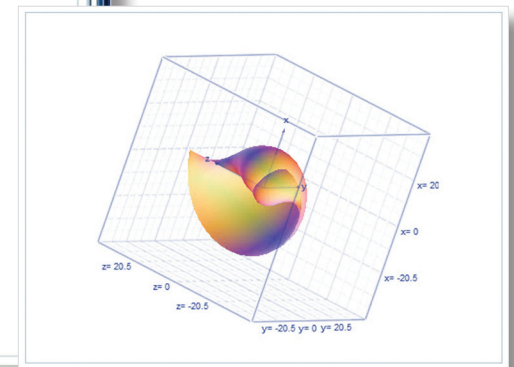
# Make math visual.

Students grasp math concepts better when they're presented visually. That's why Microsoft Mathematics has a full-featured graphing calculator built in. It's powerful enough to provide help with the most complex math topics, but simple enough for students to start using right away.



## Teaching Tip

The students have the tools now to create a customized movie where the picture oscillates back-and-forth from two quadric surfaces such as a hyperbolic paraboloid, and an elliptic paraboloid.



### Show, don't just tell.

Microsoft Mathematics makes it easy to generate large 2D and enhanced 3D color graphs that fully depict an answer. Students can play with variables in the equation and instantly see the effects. An animated Trace function shows how values change at different points along the graph.

### Avoid confusion.

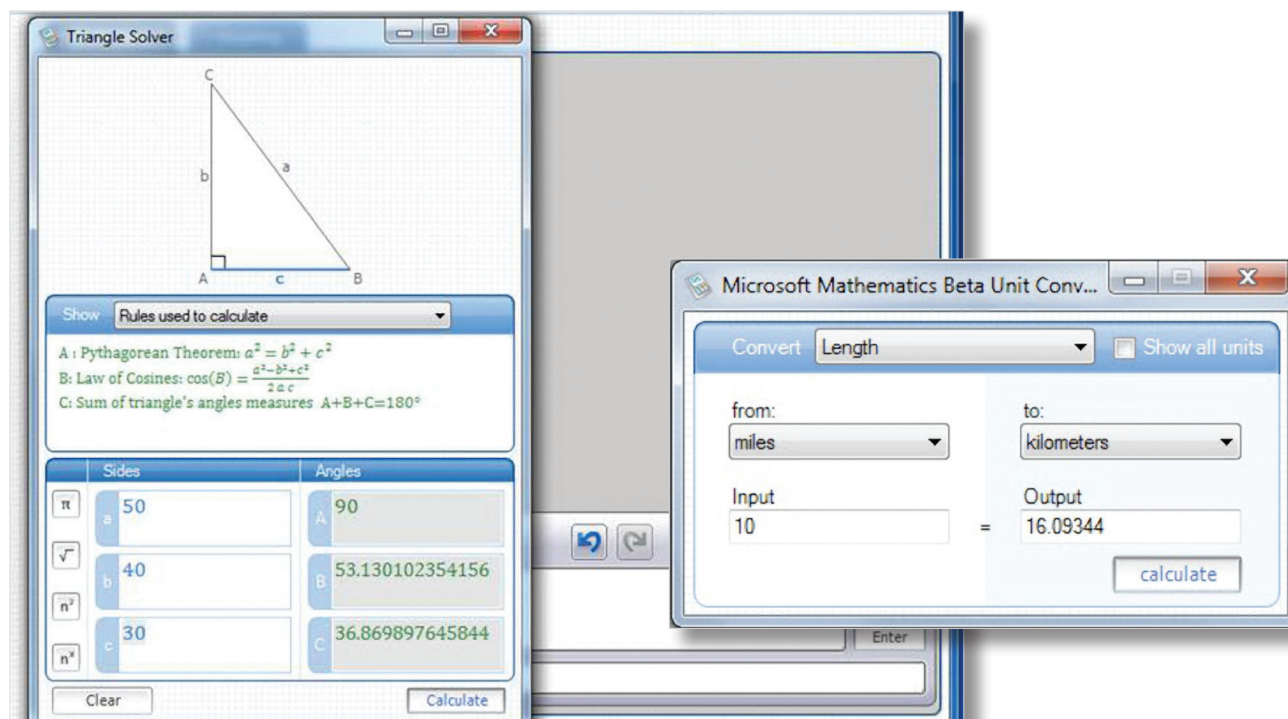
Easy pull-down menus guide students to the graphing functions they need for the specific subject they're studying, such as calculus, statistics, trigonometry, or algebra. Students learning about partial derivatives can graph complex functions with a click.

### Improve skills.

The graphing calculator has a fully functional keypad with operations and actions such as factor, least common multiple, greatest common factor, round, expand, and slope. Scroll-over text explains each button, improving students' ability to use conventional hand-held graphic calculators and stay ahead of the curve.

# Tools to deepen understanding.

Teachers often must cover vast territories of math to keep pace with the pressures of standardized testing. That can leave little time for exploring each area in depth. With Microsoft Mathematics, teachers can help students dive into the math concepts they're most interested in.



## The right tools.

Students grasp complex concepts most firmly when they're able to experiment with them on their own. But to do so, they need the right tools. Microsoft Mathematics is packed with tools that help students gain the confidence to start thinking about math more independently.

## Make triangles less obtuse.

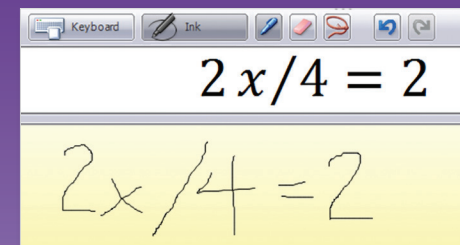
The included Triangle Solver is a smart and easy graphing tool that helps students explore triangles. As they solve sides, angles, values, and formulas, students develop an understanding of how all those parts are interrelated.

## Quick conversions.

A conversion tool helps students quickly convert one unit into another, including length (from inches to millimeters, for example), area, pressure, temperature, velocity, time, and more. Less time spent calculating conversions leaves more time for testing, exploring, and playing with math concepts.

What do you call a triangle whose sides are equal? Select Triangle Solver and enter 10 for sides: a, b, and c. Select Triangle Type from the drop down to find it defines three types of triangles: Equilateral, Isosceles, and Acute Triangles.

**Teaching Tip**



## Math power on the go.

Mathematical insight can strike anywhere. Built-in Ink Handwriting Support enables teachers and students to hand-write math problems and equations in a worksheet area on their tablet or ultra-mobile PCs for immediate solving or later work.

# Multiply your students' interest. Today.

To find out more about Microsoft Mathematics 4.0, **go to [www.microsoft.com/mathematics](http://www.microsoft.com/mathematics)**

There you will find helpful, informative videos showing how Microsoft Mathematics can easily integrate into your teaching. In addition, you can review and download free step-by-step instructions that guide you clearly through useful features like the Graphing Calculator, Triangle Solver, and more.



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